

Claims

1. A medicament dispenser for use with a medicament carrier having multiple distinct medicament doses carried thereby, said dispenser having an internal
5 mechanism for dispensing the distinct medicament doses carried by said medicament carrier, said mechanism comprising,
- a) receiving means for receiving the medicament carrier;
- 10 b) release means for releasing a distinct medicament dose from the medicament carrier on receipt thereof by said receiving means;
- c) an outlet, positioned to be in communication with the medicament dose releasable by said release means;
- 15 d) indexing means for individually indexing the distinct medicament doses of the medicament carrier; and
- e) counting means for counting each time a distinct medicament dose of the
20 medicament carrier is indexed by said indexing means,
- wherein said counting means is provided as a distinct electronic counter unit that is reversibly receivable by the medicament dispenser.
- 25 2. A medicament dispenser according to claim 1, wherein said dispenser has a housing and said electronic counter unit is reversibly receivable by said housing.
3. A medicament dispenser according to claim 2, wherein said housing is provided with a cover and said electronic counter unit is reversibly receivable by said
30 cover.

4. A medicament dispenser according to claim 3, wherein said cover is moveable relative to the housing.

5. A medicament dispenser according to any of claims 1 to 4, wherein the
5 electronic counter unit comprises a unit housing; an LCD display screen and a protective viewing window provided to said unit housing.

6. A medicament dispenser according to any of claims 2 to 5, wherein the housing or any cover provided thereto has a cut-away portion shaped for reversible
10 receipt of the electronic counter unit.

7. A medicament dispenser according to claim 6, wherein the electronic counter unit has a unit housing shaped for socket receipt by the cut-away portion of the housing or cover.
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8. A medicament dispenser according to claim 7, wherein the electronic counter unit is receivable in reversible snap-fit fashion within the cut-away portion.

9. A medicament dispenser according to any of claims 1 to 8, wherein the
20 electronic counter unit is in switching contact with switching means coupled to the indexing means such that an indexing action results in switching thereof to register a count at the electronic counter unit.

10. A medicament dispenser according to claim 9, wherein the switching means
25 comprises a mechanical arm protruding from the medicament dispenser.

11. A medicament dispenser according to any of claims 1 to 8, wherein the electronic counter unit comprises an electronic reader capable of reading an analogue count indicium and an electronic display for displaying said indicium in
30 digital form.

12. A medicament dispenser according to claim 11, wherein the medicament dispenser comprises analogue count means and the analogue count indicium is readable therefrom by said electronic reader.

5 13. A medicament dispenser according to claim 11, wherein the medicament carrier is provided with analogue count indicia arranged sequentially thereon and readable therefrom by the electronic reader.

14. A medicament dispenser according to any of claims 1 to 8, wherein the
10 electronic counter unit incorporates a push-button actuation feature.

15. A medicament dispenser according to any of claims 1 to 14, wherein the electronic counter unit is adapted to display further information of use to the patient, said information selected from the group consisting of dose remaining information,
15 time since last dose information, low dose warning information, dose dispensed from dispenser information and replacement dispenser needed information.

16. A medicament dispenser for use with a medicament carrier having multiple distinct medicament doses carried thereby, said dispenser having an internal
20 mechanism for dispensing the distinct medicament doses carried by said medicament carrier, said mechanism comprising,

a) receiving means for receiving the medicament carrier;

25 b) release means for releasing a distinct medicament dose from the medicament carrier on receipt thereof by said receiving means;

c) an outlet, positioned to be in communication with the medicament dose releasable by said release means;

d) indexing means for individually indexing the distinct medicament doses of the medicament carrier; and

e) analogue counting means for counting each time a distinct medicament dose
5 of the medicament carrier is indexed by said indexing means,

f) manipulating means to manipulate an analogue count indicium provided by said analogue counting means.

10 17. A medicament dispenser according to claim 16, wherein said manipulating means acts such as to magnify said analogue count indicium.

18. A medicament dispenser according to either of claims 16 or 17, wherein the manipulating means comprises an electronic reader capable of reading an analogue
15 count indicium and an electronic display for displaying a manipulated representation of that indicium in digital form.

19. A medicament dispenser according to either of claims 16 or 17, wherein the manipulating means a prismatic viewer capable of acting on the analogue count
20 indicium and causing it to be displayed in manipulated form at a desired viewing position.

20. A medicament dispenser according to any of claims 1 to 19, additionally comprising a medicament carrier in the form of an elongate blister strip comprising
25 plural distinct medicament doses of medicament in blisters sequentially arranged therealong.

21. A medicament dispenser according to claim 20, wherein the medicament doses comprise medicament is in powdered or solid (e.g. tablet) form.

22. A medicament dispenser according to claim 21, wherein the medicament is selected from the group consisting of albuterol, salmeterol, fluticasone propionate and beclomethasone dipropionate and salts or solvates thereof and any combination thereof.

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23. A medicament dispenser according to claim 22, wherein said combination comprises salmeterol xinafoate and fluticasone propionate.

24. A medicament dispenser according to any of claims 21 to 23, wherein the
10 medicament additionally comprises an excipient.

25. A medicament dispenser according to claim 24, wherein the excipient is lactose.